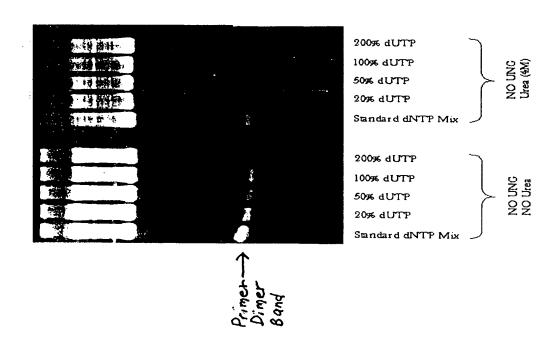
FIG. 1



Protocol		
Cycle 1: (1X) Step 1:	95.0 C	for 01:00
Cycle 2: (40X) Step 1:	95.0 C	for 00:20
Step 2:	53.0 C	for 00:20
Step 3:	98.0 C	for 00:20
Cycle 3: (1X)		

Reaction Component	initial Concentration or Volume	Final Concentration/ Volume
QuantMaster Probe Buffer 10X	10X	1X
DATP MIX		
MMD1 10mM	10mM	200uM
4CTP	dCTP 10mM	200uM
dGTP	dGTP 10mM	200um
qTTb	dTTP 10mM	200uM
FactorVIII Forward Primer 110uM	10uM	200nM
FactorVIII Reverse Primer	10uM	200пМ
HotMaster Teg Polymerase 5U/U	SUNU	10
MBGW	WA	36.8 - 38.8 ut.
*Human gDNA (Promega) 25ng/ul	25ngiul.	50ng
* Not feelinged in NTCs		

	HosMaster Tao Reactions w/ 20% dUTP Mix	UTP-MIX
Describe Component	Initial Concentration or Volume	Final Concentration Volume
Quantifianter Probe Buffer 10X		1X
dNTP Mix		
	dATP 10mM	200uM
ACTP ACTP	dCTP 10mM	200mM
4GTP		200um
Mm8 GTTP 8mM	8mM	160uM
AUTP 2mM	25 M	40uM
FactorVIII Forward Primer 10uM	10uM	200nM
FactorVIII Reverse Primer 10uM	10uM	ZODNM
HotMarder Tap Polymerase 50/0	SUM	2-
MBGW	NA	36.8 - 38.8 ul.
*Human gDNA (Promega) 25ng/ul.	25ng/ut.	50ng
Not included in NTCs		

NTC w/ 20% dUTP Mix

NTC w/ STND dNTPs

HotMaster Taq w/ 20% dUTP Mix

HotMaster Taq w/ STND dNTPs

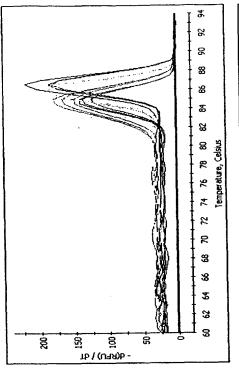
100bp Ladder

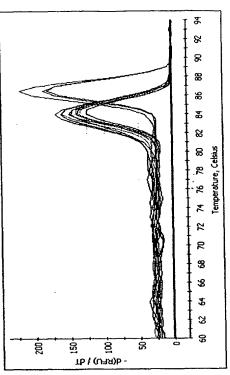












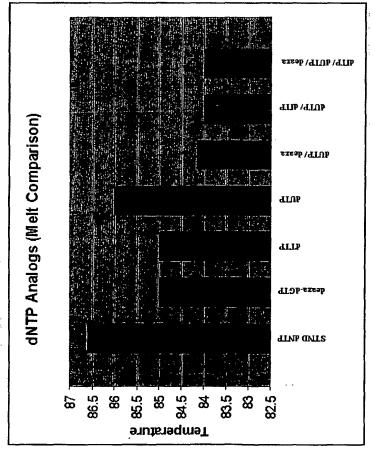
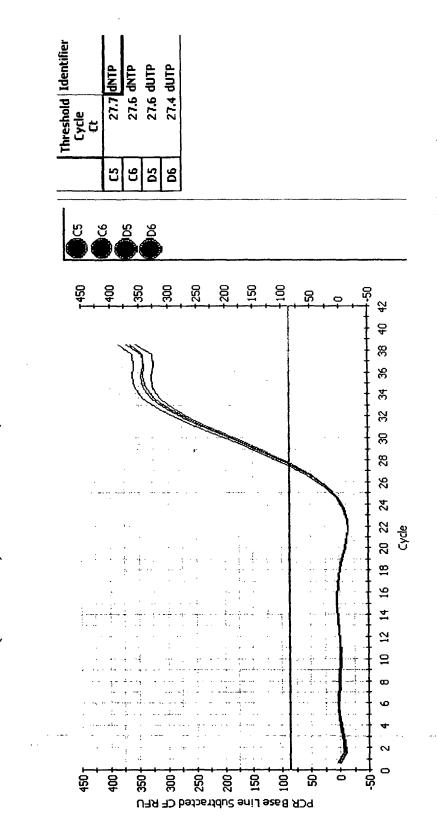


FIG. 3

dTTP (10mM) vs dUTP (2.5mM, 7.5mM dTTP)



In real-time RT-PCR, the use of dTTP or a combination of dTTP and dUTP does not seem to affect the Ct or RFU significantly.

FIG. 4A

Standard dNTP mix with dTTP (10mM) vs dUTP mix (2.5mM dUTP, 7.5mM dTTP)

These results show that the addition of dUTP to the dNTP mix does not significantly affect the product yield.

TIND ATIM TIND

FIG. 4B

Beta-Actin mRNA Sequence

atégatgatgatatogocgocgotogogogosacggotocggoatglgoaggocggottegggatg cgatgococcegggocgtottecoclocategtgggggogocoaggoacagggotogogggatg gglcagaaggattoctatglgggogacgagggocagggaaagaggcatocloacoctgaagacocca togagcacggoatcgtcaccaactgggacgacatggagaaaatctggoaccacacttclacaatgagctg cglgtgggotocgaggaacoccgtggdgagaagacgacgaacacctggaacaacgggotog

FIG. 5A

Beta-Actin partial Gene Sequence w/ Intron

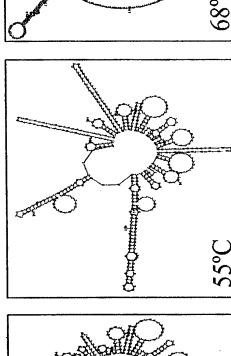


FIG. 5B

HotMaster Tag Control 100bp Ladder w/o 5X TaqMaster (7% on-propyl sulfoxide) 300mM Sorbitol 200 mM Sorbitol 100mM Sorbitol 40mM Sorbitol 10mM Sorbital OmM Sorbitol HotMaster Taq Control W-SK TaqMaster (7% n-propyl sulfaxide) 100bp Ladder 300mM Sorbitol 200mM Sorbitol t00mM Sorbitol 40mM Sorbitol LamM Sorbitol OneM Sorbitol

100bp Ladder STND dNTP/ 300mM Sorbitol STND antp/3% DMSO

25% dUTP HotMaster Control

STND dNTP HotMaster Control

25% dUTP/3%DMSO/300mM Mann/SSBP

25% dUTP/ 3%DMSO/ 300mM Sorb/SSBP

25% dUTP/ 300mM Maunitol/ SSBP

25% dUTP/300mM Sorbital/SSBP

25% dUTP/3% DMSO/SSBP

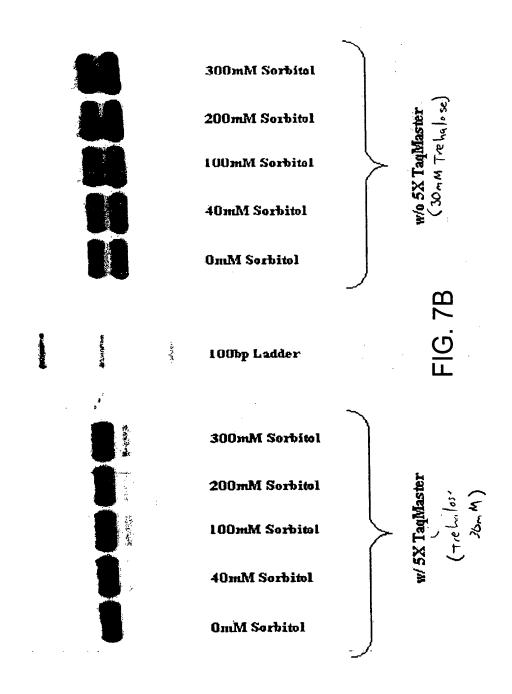
25% dUTP Mix/300mM Mannitol

25% dUTP Mix/300mM Sorbitol

25% dutp Mix/3% DMSO

STND dTNP/ 300mM Mannitol

100hp Ladder



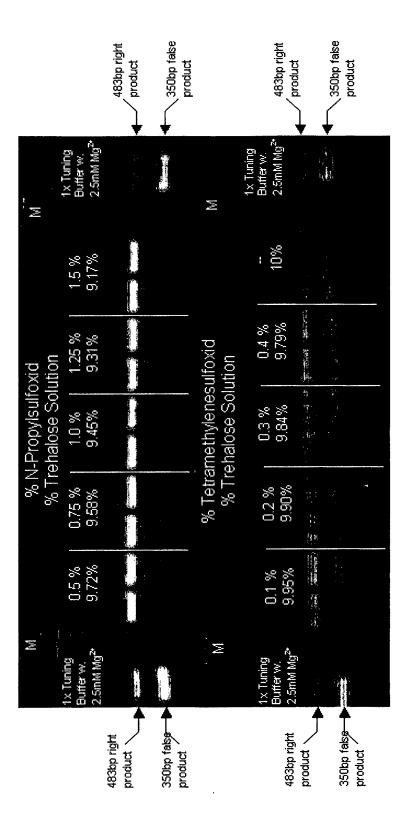
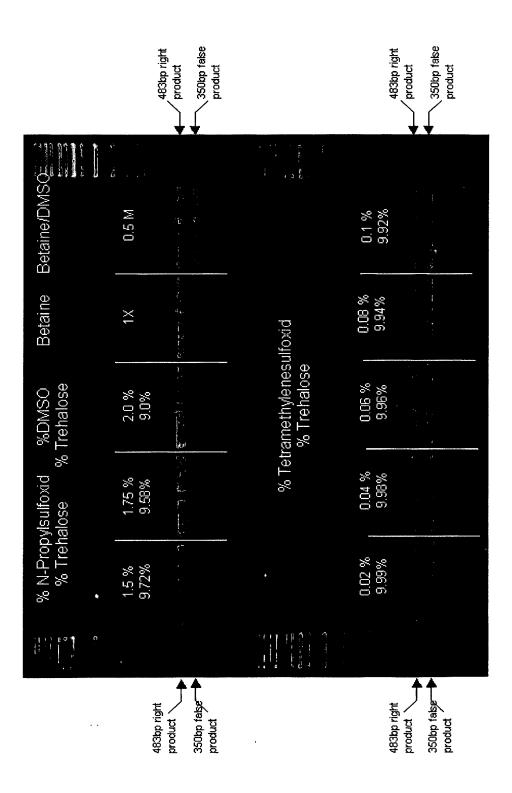


FIG. 8



7. C